wherein the plurality of piezoelectric elements are arranged in a two-dimensional array to be spaced apart from one another in columns and lines, and a plurality of the side electrode substrates, including the side electrode substrate, are inserted into gaps between the columns of the plurality of piezoelectric elements, and

wherein heights of the plurality of side electrodes of the piezoelectric elements of a first column are decreased in a lengthwise direction of the first column, and heights of the plurality of side electrodes of the piezoelectric elements of a second column adjacent to the first column are increased in the lengthwise direction of the second column.

23. An ultrasound image diagnosis apparatus comprising:

an ultrasonic probe comprising an ultrasonic transducer and a housing accommodating the ultrasonic transducer; and

a signal processor for generating an ultrasonic wave image based on an ultrasonic wave echo signal detected by the ultrasonic probe,

wherein the ultrasonic transducer comprises:

a plurality of piezoelectric elements arranged in at least one column;

individual electrodes provided on at least one surface of top and bottom surfaces of each of the plurality of piezoelectric elements;

a plurality of side electrodes each extending from the individual electrodes along one side surface of a corresponding piezoelectric element among the plurality of piezoelectric elements; and

a side electrode substrate comprising a plurality of wiring lines bonded to the one side surface of the plurality of piezoelectric elements and electrically connected to the plurality of side electrodes, respectively,

wherein the plurality of piezoelectric elements are arranged in a two-dimensional array to be spaced apart from one another in columns and lines, and a plurality of the side electrode substrates, including the side electrode substrate, are inserted into gaps between the columns of the plurality of piezoelectric elements, and

wherein heights of the plurality of side electrodes of the piezoelectric elements of a first column are gradually decreased in a lengthwise direction of the first column, and heights of the plurality of side electrodes of the piezoelectric elements of a second column adjacent to the first column are gradually increased in the lengthwise direction of the second column.

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